Amendment to the Drawings

The Examiner objected to the drawings and requires that Figs. 6 and 7 be designated as -- Prior Art --. Applicants have made the requested change. Enclosed is the Replacement Sheet which replaces the original sheet 6 of the drawings including the same Figures.

Attachment: Replacement Sheet for sheet 6 of the drawings.

REMARKS

This is a response to the Office Action dated August 7, 2007. Claims 1-20 are pending. Claims 1-20 stand objected to for including various informalities. In addition, claims 1, 7-8, and 15 stand rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent o. 4,885,791 ("Fujii et al.") in view of U.S. Patent No. 6,975,993 ("Keiller"), and claims 2-6, 9-14, and 16-20 stand rejected under 35 U.S.C. § 103(a) as obvious over Fujii et al. in view of Keiller and further in view of U.S. Patent No. 6,324,509 ("Bi et al."). With this response, claims 1, 2, 5, 8, 9, 12-13, 15-17, 19 and 20 have been amended for clarity. No new matter has been added.

Claim Objections

Claims 1-20 stand objected to for including various informalities. (Office Action, pp. 2-3.) With this response, the claims have been amended to remove these informalities. Accordingly, Applicants respectfully request that these objections be withdrawn.

Rejections Under 35 U.S.C. 103(a) Over Fujii et al. In View Of Keiller

Independent claims 1, 8, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fujji et al. in view of Keiller. With this response, independent claims 1, 8, and 15 have been amended for clarity. Applicants respectfully submit that Fujii et al. and Keiller fail to disclose each and every limitation of the independent claims, either alone or in combination.

Claim 1, as amended, recites, "generating, from speech data for which speech recognition is to be performed, a plurality of pieces of speech data whose start positions of non-speech regions differ." Claim 8, as amended, recites, "a speech data generation section for generating, from speech data for which speech recognition is to be performed, a plurality of pieces of speech data whose start positions of non-speech regions differ." Similarly, claim 15, as amended, recites, "a speech data generation section for generating, from speech data for which speech recognition is to be performed, a plurality of pieces of speech data whose start positions of non-speech regions differ." Neither Fujii et al. nor Keiller disclose a system that generates a plurality of pieces of speech data as claimed.

Fujii et al. relates to, "a speech recognition apparatus comprising: a speech analysis portion for extracting parameters necessary for determination of spoken words; a

speech period detecting portion for extracting one or more combinations of speech periods using the parameters; and a structure analysis portion for detecting feature points indicative of phoneme structure of each word and for determining a word through computation of similarity to proposed words in accordance with the presence and absence of the feature points. Therefore, erroneous recognition due to noise introduction or the like can be reduced by detecting one or more combinations of proposed speech periods by the speech period detecting portion. By extracting only necessary number of extracting points, which contribute to the distinguishment between words, with reference to analysis procedure provided for each word, the sharpness of determination is bettered. More stable operation than conventional apparatus has been achieved in connection with time base expansion/compression. Small numbers of parameters obtained through speech analysis are used to reduce the amount of computation, while the above-mentioned parameters are stable against difference in phenemes [sic] due to difference in speakers." (Fujii et al., Abstract.) However, the system described in Fujii et al. does not disclose generating a plurality of pieces of data to be analyzed by a speech recognition engine.

The Office Action alleges that the claimed feature is described with reference to a speech period detection analysis described in Fujii et al. (Office Action, at p. 2.) However, the speech period detection portion of Fujii et al. generates a plurality of possible speech periods (i.e., start and end points). (Fujii et al., col. 8, ll.24-32.) The system then extracts proposed words based on pattern matching where the pattern is altered for each proposed time period. (Fujii et al., col. 8, ll.32-35.) The proposed words having the highest similarity to the input text are selected as the result. (Fujii et al., col. 6, l.51 - col. 7, l.6, col. 8, ll.28-64.) Fujii et al. does not describe generating plural pieces of data to be analyzed. Instead, the system of Fujii et al. modifies the recognition analysis (i.e., pattern matching algorithm) for each proposed period of time (start and end points). In contrast, Applicants' claims are directed to systems and methods that generate a plurality of pieces of speech data. Nowhere does Fujii et al. describe generating a plurality of pieces of data to be analyzed by a speech recognition engine.

Keiller fails to fill the gap. The Keiller system describes a networked speech recognition system for use with a plurality of users that may or may not have associated custom speech recognition engines. (Keiller, Abstract.) Although the system of Keiller does select from among a plurality of results based on frequency, the Keiller system still

uses a single piece of speech data and processes it using all available engines (both custom and standard) when a particular user is unidentified. (Keiller, col. 20, l.65 – col. 21, l. 11.) The Keiller system then chooses from among these results. (*Id.*) As a result, the system of Keiller also fails to disclose a system that generates a plurality of pieces of speech data. Instead, both Keiller and Fujii et al. work the opposite way, i.e., applying a plurality of speech recognition processes (either engines in Keiller or modified patterns in Fujii et al.) to a single piece of data.

For at least these reasons, Fujii et al. and Keiller fail to disclose each and every limitation of independent claims 1, 8, and 15. Accordingly, Applicants respectfully request that the rejections of these claims be withdrawn.

Dependent claim 7 also stands rejected under 35 U.S.C. § 103(a) as unpatentable over Fujii et al. in view of Keiller. Dependent claim 7 depends from claim 1, and should be allowed for at least the reasons described above for independent claim 1. Accordingly, Applicants respectfully request that this rejection of this claim be withdrawn.

Rejections Under 35 U.S.C. 103(a) Over Fujii et al. In View Of Keiller And Further In View of Bi et al.

Claims 2-6, 9-14, and 16-20 stand rejected under 35 U.S.C. § 103(a) as obvious over Fujii et al. in view of Keiller and further in view of Bi et al.

Dependent claims 2-6, 9-14, and 16-20 depend from claims 1, 8, and 15, respectively. As described above, the combination of Fujii et al. and Keiller fails to describe each and every limitation of independent claims 1, 8. and 15. Applicants respectfully submit that Bi et al. fails to fill the gap of Fujii et al. and Keiller. Bi et al. similarly fails to describe a system or method that generates a plurality of pieces of speech data. Thus, dependent claims 2-6, 9-14, and 16-20 should be allowed for at least the reasons set forth above for the independent claims. Accordingly, Applicants respectfully request that the rejections of these claim be withdrawn.

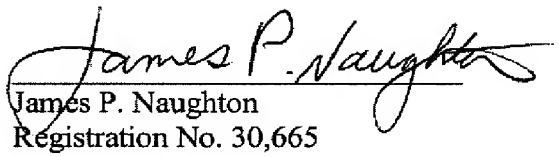
Moreover, the additional limitations of the dependent claims provide additional reasons for allowance. For example, with respect to claims 2, 9, and 16, the Examiner acknowledges that the combination of Fujii et al. and Keiller does not disclose a system "wherein, by sequentially shifting the start position of said non-speech region from the start position of the speech region to a position preceding by a predetermined time, a

plurality of pieces of speech data whose start positions of non-speech regions differ are generated from said speech data for which speech recognition is to be performed." Instead, the Examiner relies on Bi et al. for this teaching. It appears that the Examiner is misreading the limitation. The system of Bi et al. shifts back the start time for every detected piece of speech data by a fixed offset to account for delays in real-time processing. (Bi et al., col. 5, ll. 13-30.) In other words, there is no sequential shifting at all. Thus, the combination of Fujii et al., Keiller, and Bi et al. would result in a system that shifts back each of a proposed set of start times by a fixed period of time to account for delays in real-time processing, not a system or method that generates a plurality of pieces of data by sequentially shifting the start position as claimed. For at least these additional reasons, claims 2, 9, and 16 are also patentable over Fujii et al. in view of Keiller and further in view of Bi et al. Accordingly, Applicants respectfully request that the rejections of these claims be withdrawn for this additional reason.

SUMMARY

Pending claims 1-20, as amended, are patentable. Applicants respectfully request the Examiner grant allowance of this application. The Examiner is invited to contact the undersigned attorney for the Applicants via telephone at 312-321-4723 if such communication would expedite this application.

Respectfully submitted,



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